

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A network system for connecting a plurality of terminal devices via an agent module, comprising:
 - one of the terminal devices; and
 - the agent module disposed between a network and the one of the terminal devices, for relaying an access from the one of the terminal devices to the network,wherein the agent module includes a request signal transmission section for transmitting to the one of the terminal devices a request signal requesting to initiate and establish an information transmission enabled state between the one of the terminal devices and the agent module, the request signal including identification information to identify the agent module; and
- the one of the terminal devices includes:
 - a reception section for receiving the transmitted request signal,
 - a first determination section for determining whether the agent module which has transmitted the request signal is an agent module to which the one of the terminal devices receiving the request signal is to be connected; and
 - an establishment section for establishing the information transmission enabled state between the one of the terminal devices receiving the request signal and the agent module which has transmitted the request signal, when the first determination section ascertains that the agent module which has transmitted the request signal is the agent

module to which the one of the terminal devices receiving the request signal is to be connected.

2. (previously presented): The network system according to claim 1,
wherein the agent module includes:

an identification section for identifying whether another of the terminal devices other than the one of the terminal devices is another authorized terminal device that is to be connected to the agent module, when the another of the terminal devices issues to the network a request for a connection to the one of the terminal devices to be connected to the network through the agent module;

a connection section for connecting the one of the terminal devices and the another of the terminal devices after the information transmission enabled state is established between the agent module and the one of the terminal devices; and

when the identification section ascertains that the another of the terminal devices is the another authorized terminal device to be connected to the agent module, the request transmission section outputs the request signal to the one of the terminal devices to establish the information transmission enabled state.

3. (previously presented): The network system according to claim 2,
wherein the another of the terminal devices is used to remotely control an information processing apparatus connected to the one of the terminal devices; and

when the another of the terminal devices and the one of the terminal devices are connected by the connection section, the another of the terminal devices performs a processing for the remote control.

4. (previously presented): The network system according to claim 3, wherein the information processing apparatus is an information recording apparatus for recording information in a recording medium; and

the another of the terminal devices performs the remote control to set at least a time from which the information recording apparatus starts a process for recording the information.

5. (previously presented): The network system according to claim 1, wherein the agent module includes:

an accumulation section for accumulating distribution information to be distributed to the one of the terminal devices;

a second determination section for determining, based on a state signal transmitted from the one of the terminal devices, whether the one of the terminal devices is ready for receiving the distribution information after the information transmission enabled state is established between the one of the terminal devices and the agent module; and

a distribution section for distributing the distribution information when it is determined that the one of the terminal devices is ready for receiving the distribution information, and

the one of the terminal devices includes:

a state signal transmission section for transmitting to the agent module the state signal indicating whether the one of the terminal devices is ready for receiving the distribution information; and

an distribution information reception section for receiving the distribution information, which is distributed.

6. (previously presented): The network system according to claim 1,
wherein the agent module includes:

an update information accumulation section for accumulating update information used to update a function of an information processing apparatus connected to the one of the terminal devices; and

an update information transmission section for transmitting the update information to the one of the terminal devices after the information transmission enabled state is established between the one of the terminal devices and the agent module, and
the one of the terminal devices includes:

an update information reception section for receiving the update information; and

an update section for utilizing the update information to update the function of the information processing apparatus.

7. (previously presented): The network system according to claim 1,
wherein the agent module includes:

a failure signal reception section for receiving a failure signal, when the failure signal indicating that an information processing apparatus connected to the one of the terminal devices has a breakdown is transmitted from the one of the terminal devices; and

a result signal transmission section for diagnosing a failure state of the information processing apparatus based on the failure signal to transmit diagnostic result information to the one of the terminal devices after the failure signal is received and the information transmission enabled state is established between the one of the terminal devices and the agent module, and

the one of the terminal devices further includes:

a failure signal transmission section for transmitting to the agent module the failure signal indicating that the information processing apparatus has a breakdown;

a result signal reception section for receiving the diagnostic result information;
and

a failure processing section for performing a process for the information processing apparatus having a breakdown based on the diagnostic result information.

8. (currently amended): An agent module for relaying an access from a terminal device to a network, the agent module comprising a request signal transmission section for transmitting to the terminal device a request signal requesting to initiate and establish an information transmission enabled state between the agent module and the terminal device, the request signal including identification information to identify the agent module.

9. (currently amended): A terminal device comprising:

a reception section for receiving a request signal from an agent module for relaying an access from the terminal device to a network, the request signal including identification information to identify the agent module,

a determination section for determining whether the agent module which has transmitted the request signal is an agent module to which the terminal device receiving the request signal is to be connected; and

an establishment section for establishing an information transmission enabled state between the terminal device receiving the request signal and the agent module which has transmitted the request signal, when the determination section ascertains that the agent module which has transmitted the request signal is the agent module to which the terminal device receiving the request signal is to be connected,

wherein the request signal, which is issued by the agent module, initiates establishing the information transmission enabled state between the terminal device and the agent module.

10. (currently amended): A network operation method for connecting a plurality of terminal devices via an agent module, comprising the steps of:

transmitting from the agent module to one of the terminal devices a request signal requesting to initiate and establish an information transmission enabled state between the one of the terminal devices and the agent module, the request signal including identification information to identify the agent module;

determining whether the agent module is an agent module to which the one of the terminal devices is to be connected;

establishing the information transmission enabled state between the one of the terminal devices and the agent module, when it is determined that the agent module is the agent to which the one of the terminal devices is to be connected.

11. (previously presented): The network operation method according to claim 10, further comprising the steps of:

identifying whether another of the terminal devices other than the one of the terminal devices is another authorized terminal device that is to be connected to the agent module, when transmitting a request for a connection from the another of the terminal devices; and

connecting the one of the terminal devices and the another of the terminal devices after the establishing step,

wherein the request signal transmitting step is performed to establish the information transmission enabled state, when it is identified, in the identifying step, that the another of the terminal devices is the another authorized terminal device that is to be connected to the agent module.

12. (previously presented): The network operation method according to claim 11, further comprising the steps of:

remotely controlling an information processing apparatus connected to the one of the terminal devices;

performing a process for the remotely controlling step after the connection step.

13. (original): The network operation method according to claim 12, further comprising the steps of recording information in a recording medium.

14. (previously presented): The network operation method according to claim 10, further comprising the steps of:

accumulating distribution information to be distributed to the one of the terminal devices;
transmitting a state signal from the one of the terminal devices to the agent module after the establishing step;

determining whether the one of the terminal devices is ready for receiving the distribution information based on the state signal; and

distributing the distribution information from the agent module to the one of the terminal devices, when it is determined that the one of the terminal devices is ready for receiving the distribution information.

15. (previously presented): The network operation method according to claim 10, further comprising the steps of:

accumulating update information used to update a function of an information processing apparatus connected to the one of the terminal devices;

transmitting the update information from the agent module to the one of the terminal devices after the establishing step; and

updating the function of the information processing apparatus by using the update information.

16. (previously presented): The network operation method according to claim 10, further comprising the steps of:

transmitting a failure signal indicating that an information processing apparatus connected to the one of the terminal devices has a breakdown from the one of the terminal devices to the agent device, when the information processing apparatus has a breakdown;

diagnosing a failure state of the information processing apparatus based on the failure signal after the establishing step;

transmitting a diagnostic result information from the agent module to the one of the terminal devices; and

performing a process for the information processing apparatus having a breakdown based on the diagnostic result information.

17. (currently amended): An information recording medium in which an agent program is stored in a readable form for a computer, the agent program comprising the steps of:

transmitting from an agent module to a terminal device a request signal requesting to initiate and establish an information transmission enabled state between the terminal device and the agent module, the request signal including identification information to identify the agent module; and

relaying an access from the terminal device to a network.

18. (currently amended): An information recording medium in which a terminal processing program is stored in a readable form for a computer, the terminal processing program comprising the steps of:

receiving a request signal transmitted to a terminal device from an agent module for relaying an access from the terminal device to a network, the request signal used to initiate and establish an information transmission enabled state between the terminal device and the agent module, the request signal including identification information to identify the agent module;

determining whether the agent module is an agent module to which the terminal device is to be connected based on the identification signal;

establishing the information transmission enabled state between the terminal device and the agent module, when it is determined that the agent module is the agent module to which the terminal device is to be connected,

wherein the request signal, which is issued by the agent module, initiates establishing the information transmission enabled state between the terminal device and the agent module.

Claims 19 - 20 (canceled).